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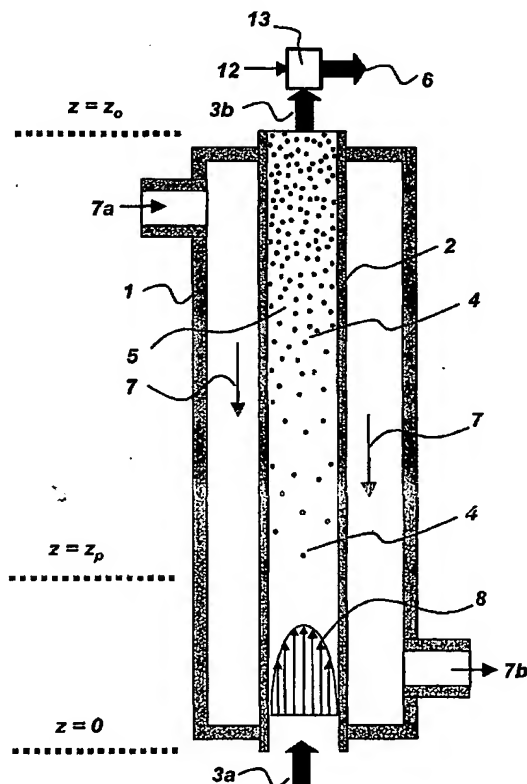
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR CONTINUOUS PREPARATION OF NANOMETER-SIZED HYDROUS ZIRCONIA SOL



(57) Abstract: The present invention relates to a method a method for continuous preparation of a well dispersed spherical hydrous zirconia particles with an average diameter (d_p) of 1~1,000 nm in the form of sol solution, which method comprises continuously supplying the aqueous solution of a zirconium salt at a concentration of 0.001~0.5 mole/l to a reactor consisting of one or more than two reaction tubes at a temperature of less than 25°C, heating the said aqueous solution in the reactor(s) in a continuous flow state up to the boiling point, and then discharging the said solution through the outlet of the said reactor(s). Contrary to the method employing a conventional batch-type reactor or semi-continuous stirred-type reactor, the method for continuous preparation of a hydrous zirconia sol according to the present invention can allow various operational parameters to be controlled in a certain range and thus contributes to remarkably improve the quality of a hydrous zirconia sol to be prepared or of the zirconia powder obtainable as a final product.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER**IPC7 C01G 25/00, C01G 25/02**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 C01G, C04B, B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 03-205317 A (Tosoh Corp.) 6 September 1991 see the whole document	1, 2, 6
A	US 5,004,711 A (Harshaw/Filtrol Partnership) 2 April 1991 see the whole document	1, 5, 6, 9
A	JP 04-187520 A (Tosoh Corp.) 6 July 1992 see the whole document	1, 11
A	US 4,784,794 A (Nissan Chemical Industries, Ltd.) 15 November 1988 see the whole document	1



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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